

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
STANDARD ANNULAR PRESSURE TEST

Operator	NORTH STAR ENERGY	State Permit Number	57434
Address		EPA Permit Number	MI-119-2D-0144
		Date of Test	11/14/2013
Well Name & Number	BLACK RIVER RANCH A1-21	Well Type	2D

Quarter	Quarter	Quarter	Section	Township	Range	Township Name	County	State
NW	NW	NW	21	32N	1E	Northmorency	Northmorency	MI
GPS file number			Latitude		Longitude		Elevation	
			45.15444		84.32739			

Company Representative	NOEL SMITH	Field Inspector	SAM H. WILLIAMS
------------------------	------------	-----------------	-----------------

GAUGE CERTIFICATION

Type Pressure Gauge WIKIA } 4 inch face 600 psi full scale 5 psi increments
 New Gauge? Yes ☒ No ☐ If no, date of calibration _____ Calibration certification submitted? Yes ☐ No ☒

TEST RESULTS

Time	0	15	30				
Annulus	350	350	350				
Tubing	54						

WELL STATUS

5 Year ☐ TD# _____
 2 Year TA ☒ TD# 14-030
 Rework after failure ☐ TD# _____
 New Permit ☐ TD# _____
 Enforcement Action ☐ TD# _____
 Annual Class 1 ☐ TD# _____

WELL CONFIGURATION

Casing Size 5 1/2
 Tubing Size 3 1/2
 Packer Type _____
 Packer set @ 1236
 Fluid Return (gal) 1 1/2 GAL.

Test Pressures: Max. Allowable Pressure Change: Initial test pressure x .03 10.5 psi
 Test Pressure change 2 psi

Test Passed ☒ Test Failed ☐ : If failed test, well must shut in, no injection can occur, and USEPA must be contacted within 24 hours. Corrective action needs to occur, the well retested, and written authorization received before injection can recommence.

COMMENT:

RECEIVED

DEC 04 2013

Signature of Company Representative	UIC BRANCH EPA, REGION 5	Date	11/14/2013
Signature of UIC Field Inspector		Date	Nov. 14, 2013